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Please search the composition of Claims 1-20; the method for the treatment and/or prevention of damaged articular cartilage of a diarthrodial joint in man or in animals of Claims 21-28; a method for the treatment and/or prevention of a damaged synovial membrane, traumatic synovitis, in man or in animals of Claims 29-36.

A copy of the claims and abstract has been provided.

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**\*\*PRIORITY CLAIMS:**

US60419009 16 OCT 2002  
US60487861 16 JUL 2003

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Foreign priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no 35 USC 119 conditions met <input type="checkbox"/> yes <input type="checkbox"/> no Verified and Acknowledged Examiners's initials				ATTORNEY DOCKET NO 1177-001 PCT	

**TITLE :** TREATMENT FOR TRAUMATIC SYNOVITIS DAMAGED ARTICULAR CARTILAGE

## Abstract of the Invention

The invention provides compositions useful for the treatment and/or prevention of damage to diarthrodial (synovial) joints and, in particular, traumatic synovitis, inflammation of the synovial membrane, and damage to the articular cartilage of the joint. Specifically, provided are compositions specially formulated for intra-articular and/or parenteral use in the treatment and/or prevention of traumatic synovitis and/or damage to articular cartilage.

Compositions adapted specifically for post surgical joint lavage or treatment and/or prevention of inflammatory arthritis, osteoarthritis (OA) and/or degenerative joint disease (DJD) are also provided. Compositions adapted for intra-articular and/or systemic administration comprised of therapeutic amounts of: chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan (hyaluronic acid) are provided.

What is claimed is:

1. A composition for the treatment and/or prevention of damaged articular cartilage of a diarthrodial joint in man or in animals, the composition comprising therapeutic amounts of: chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.
2. The composition of claim 1, wherein the therapeutic amount of chondroitin sulfate comprises from between about 0.5 grams to about 1.5 grams of a suitable chondroitin sulfate per unit dose of the composition.
3. The composition of claim 2, wherein the suitable chondroitin sulfate is CS4 chondroitin sulfate.
4. The composition of claim 2, wherein the suitable chondroitin sulfate is CS6 chondroitin sulfate.
5. The composition of claim 2, wherein the suitable chondroitin sulfate is a mixture of CS4 chondroitin sulfate and CS6 chondroitin sulfate.
6. The composition of claim 1, wherein the therapeutic amount of N acetyl D-glucosamine is from about 0.5 grams to about 1.5 grams of N acetyl D-glucosamine per unit dose of the composition.
7. The composition of claim 1, wherein the therapeutic amount of hyaluronan is from about 10 mg to about 50 mg of hyaluronan per unit dose of the composition.
8. The composition of claim 1 as a sterile solution.

9. The composition of claim 1 as a sterile suspension.
10. A composition for the treatment and/or prevention of damaged articular cartilage of a diarthrodial joint in man or in animals, the composition consisting essentially of therapeutic amounts of: chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.
11. A composition adapted for the treatment and/or prevention of traumatic synovitis in man or in animals, the composition comprising therapeutic amounts of: chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.
12. The composition in claim 11 is wherein the therapeutic amount of chondroitin sulfate comprises from between about 0.5 grams to about 1.5 grams of a suitable chondroitin sulfate per unit dose of the composition.
13. The composition of claim 12, wherein the suitable chondroitin sulfate is CS4 chondroitin sulfate.
14. The composition of claim 12, wherein the suitable chondroitin sulfate is CS6 chondroitin sulfate.
15. The composition of claim 12, wherein the suitable chondroitin sulfate is a mixture of CS4 chondroitin sulfate and CS6 chondroitin sulfate.
16. The composition of claim 11, wherein the therapeutic amount of N acetyl D-glucosamine is from about 0.5 grams to about 1.5 grams of N acetyl D-glucosamine per unit dose of the composition.

17. The composition of claim 11, wherein the therapeutic amount of hyaluronan is from about 10 mg to about 50 mg of hyaluronan per unit dose of the composition.

18. The composition of claim 11 as a sterile solution.

19. The composition of claim 11 as a sterile suspension.

20. A composition adapted for the treatment and/or prevention of traumatic synovitis in man or in animals, the composition consisting essentially of therapeutic amounts of: chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.

21. A method for the treatment and/or prevention of damaged articular cartilage of a diarthrodial joint in man or in animals, comprising administering a therapeutic amount of a composition comprised of chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.

22. The method in claim 21, wherein the therapeutic composition is administered intra-articular.

23. The method in claim 21, wherein the therapeutic composition is administered intramuscularly.

24. The method in claim 21, wherein the therapeutic composition is administered intravenously.

25. A method for the treatment and/or prevention of damaged articular cartilage of a diarthrodial joint in man or in animals, comprising administering a

therapeutic amount of a composition consisting essentially of chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.

26. The method in claim 25, wherein the therapeutic composition is administered intra-articular.

27. The method in claim 25, wherein the therapeutic composition is administered intramuscularly.

28. The method in claim 25, wherein the therapeutic composition is administered intravenously.

29. A method for the treatment and/or prevention of a damaged synovial membrane, traumatic synovitis, in man or in animals, comprising administering a therapeutic amount of a composition comprised of chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.

30. The method in claim 29, wherein the therapeutic composition is administered intra-articular.

31. The method in claim 29, wherein the therapeutic composition is administered intramuscularly.

32. The method in claim 29, wherein the therapeutic composition is administered intravenously.

33. A method for the treatment and/or prevention of damaged synovial membrane, traumatic synovitis, in man or in animals, comprising administering a

therapeutic amount of a composition consisting essentially of chondroitin sulfate; N-acetyl D-glucosamine; and hyaluronan.

34. The method in claim 33, wherein the therapeutic composition is administered intra-articular.

35. The method in claim 33, wherein the therapeutic composition is administered intramuscularly.

36. The method in claim 33, wherein the therapeutic composition is administered intravenously.